IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1(Currently Amended).   A method of implementing a parallel an n-th order IIR filter which comprises the steps of:

   providing an IIR filter of order less than n; and

   operating said IIR filter of order less than n on a time-sharing basis a plurality of times such that said plurality of times multiplied by the order of said IIR filter of order less than n is equal to or greater than n, wherein a number of clock cycles required for computing an output of the IIR filter is independent of a number of filter coefficients of the IIR filter.

2(Original).   The method of claim 1 wherein said plurality of times multiplied by said order is equal to n.

3 (Previously Presented).   The method of claim 1 further including providing a decoder coupled to an input terminal of the IIR filter.

4 (Previously Presented).   The method of claim 2 further including a providing decoder coupled to an input terminal of the IIR filter.

5 (Currently Amended).   An implementation of a parallel an n-th order IIR filter which comprises:

   an IIR filter of order less than n; and

   means to operate said IIR filter of order less than n on a time-sharing basis a plurality of times such that said plurality of times multiplied by the order of said IIR filter of order less than n is equal to or greater than n, wherein a number of clock cycles required for computing an output of the IIR filter is independent of a number of filter coefficients of the IIR filter.

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6(Original).   The implementation of claim 5 wherein said plurality of times multiplied by said order is equal to n.

7(Previously Presented). The implementation of claim 5 further including a decoder coupled to an input terminal of the IIR filter.

8(Previously Presented). The implementation of claim 6 further including a decoder coupled to an input terminal of the IIR filter.

9 – 10.   Canceled.

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